MITSUBISHI ELECTRIC
Changes for the Better

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VIA EMAIL

April 6, 2011

ENERGY STAR Program
Environmental Protection Agency
Washington, DC
mostefficient@energystar.gov

Re: Proposed Most Efficient/Top Tier ENERGY STAR for Televisions

Dear ENERGY STAR Program:

Mitsubishi Digital Electronics America (MDEA) is proud to be a leader in the effort to minimize the impact of electronics and manufacturing on our environment, and is pleased to participate in many environmental initiatives, including the ENERGY STAR® program. We have devoted significant resources to participating in the ENERGY STAR program and developing large screen televisions that are very energy-efficient (and meet ENERGY STAR qualification requirements).

In the letter of March 16, 2011,[1] the Environmental Protection Agency ("EPA") proposed a pilot program to identify "highly efficient products in the marketplace" ("Top Tier"), and solicited comments on the proposed recognition requirements for 2011.[2]

MDEA manufactures *the most efficient ENERGY STAR televisions currently for sale in the United States*,[3] but these products would not qualify for the Top Tier program.

ENERGY STAR Goals

The ENERGY STAR mark is "used by millions of Americans to make energy-efficient choices…."[4] Indeed, the goal of the Top Tier program is to "drive more energy efficient products into the market more quickly."[5]

MDEA is strongly in favor of ENERGY STAR recognizing *efficient* products and supports EPA's efforts in developing programs which accomplish this goal.

Television Efficiency

Efficiency is not the same measurement as power consumption. Power consumption is a measure of the (electrical) power consumed by a device, either instantaneously (e.g., in

[1] Letter from Ann Bailey, Director, ENERGY STAR Product Labeling, US Envtl. Prot. Agency, March 16, 2011.
[2] *Id.* at 1.
[3] The two most efficient (in terms of mw/in^2) televisions listed in the March 15, 2011 ENERGY STAR Television dataset.
[4] United States Environmental Protection Agency, *ENERGY STAR® and Other Climate Protection Partnerships; 2009 Annual Report* at 16.
[5] *Supra* note 1 at 1.

Watts) or over time (e.g., in kWh per year). Efficiency is the ratio of the work produced to the power consumed.[6]

The power consumption of televisions (except, perhaps, for very small televisions) is primarily from generating light throughout the screen area. In this respect, televisions are devices which use electrical power to transform an input signal into light. Efficiency is a ratio of power consumed to screen area.

A brief analysis of the March 15, 2011 ENERGY STAR Television dataset shows that efficiency generally increases with screen size, and that the *most efficient* televisions in the dataset are two MDEA 75" LaserVue™ televisions (indicated by the red arrow in Figure 1 below).[7]

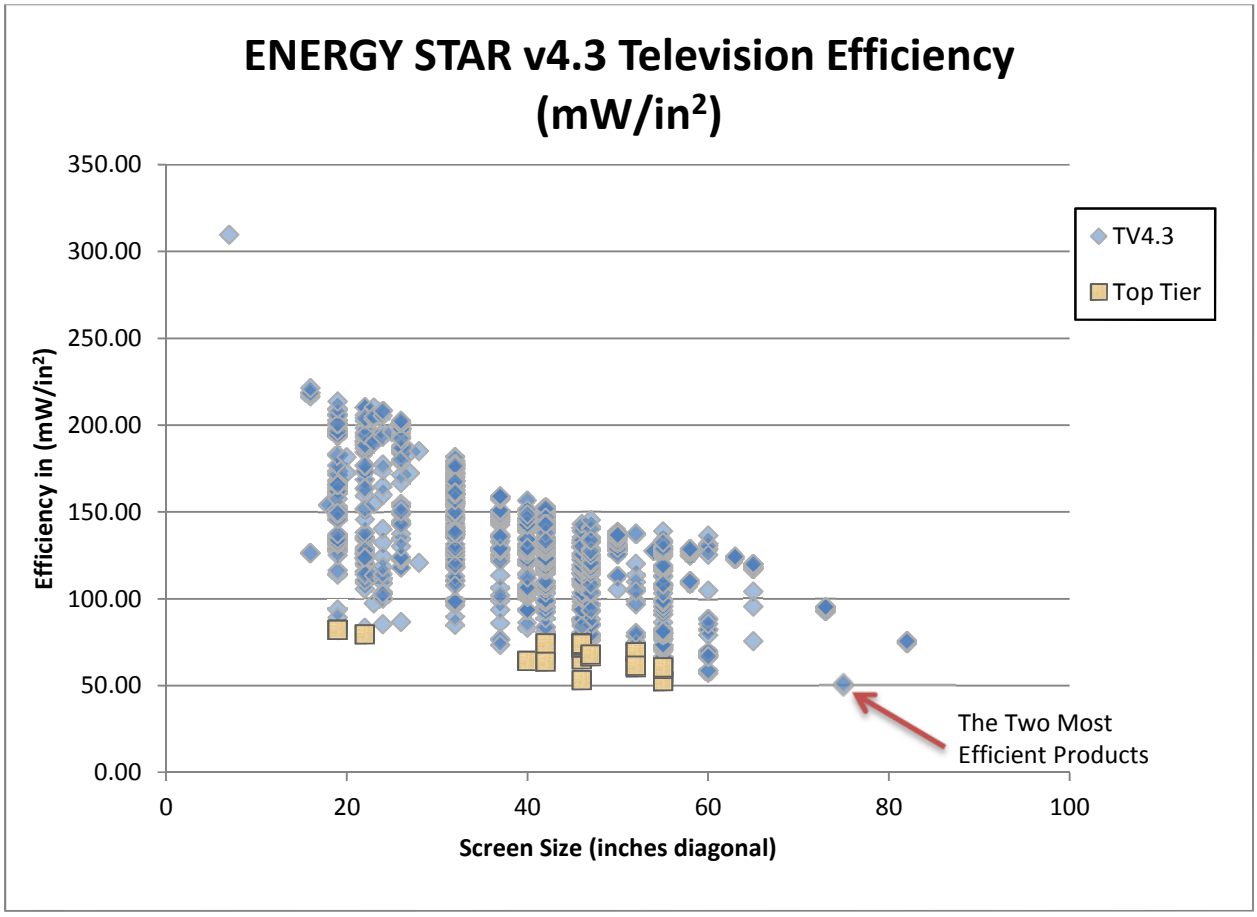

Figure 1 - Efficiency of ENERGY STAR-qualifying Televisions

[6] *See generally* "efficiency," Merriam-Webster Online Dictionary, *available at* http://www.merriam-webster.com/dictionary/efficiency (last visited Mar. 24, 2011); "efficiency," Dictionary.com Unabridged, *available at* http://dictionary.reference.com/browse/efficiency (last visited Mar. 24, 2011).

[7] Oddly, the Television Program Requirements v5.3 will exclude many of the most efficient televisions in the market by placing a consumption cap on televisions equivalent to the power allowance for 50" televisions.

Efficiency Incentives or Consumption Incentives

MDEA strongly believes that ENERGY STAR should promote *efficient* devices, not merely those which consume the least amount of power. In particular, treating televisions larger than 50" differently from smaller sets intentionally discriminates against *the most efficient class of televisions available*.

Of the televisions listed in the March 15, 2011 dataset that would qualify for Top Tier, efficiency ranges from 52.51 to 81.88 mW/in^2. The two 75" MDEA LaserVue televisions are more efficient than any device qualifying for the proposed Top Tier—indeed, are nearly twice as efficient as some "Top Tier"-qualifying devices.

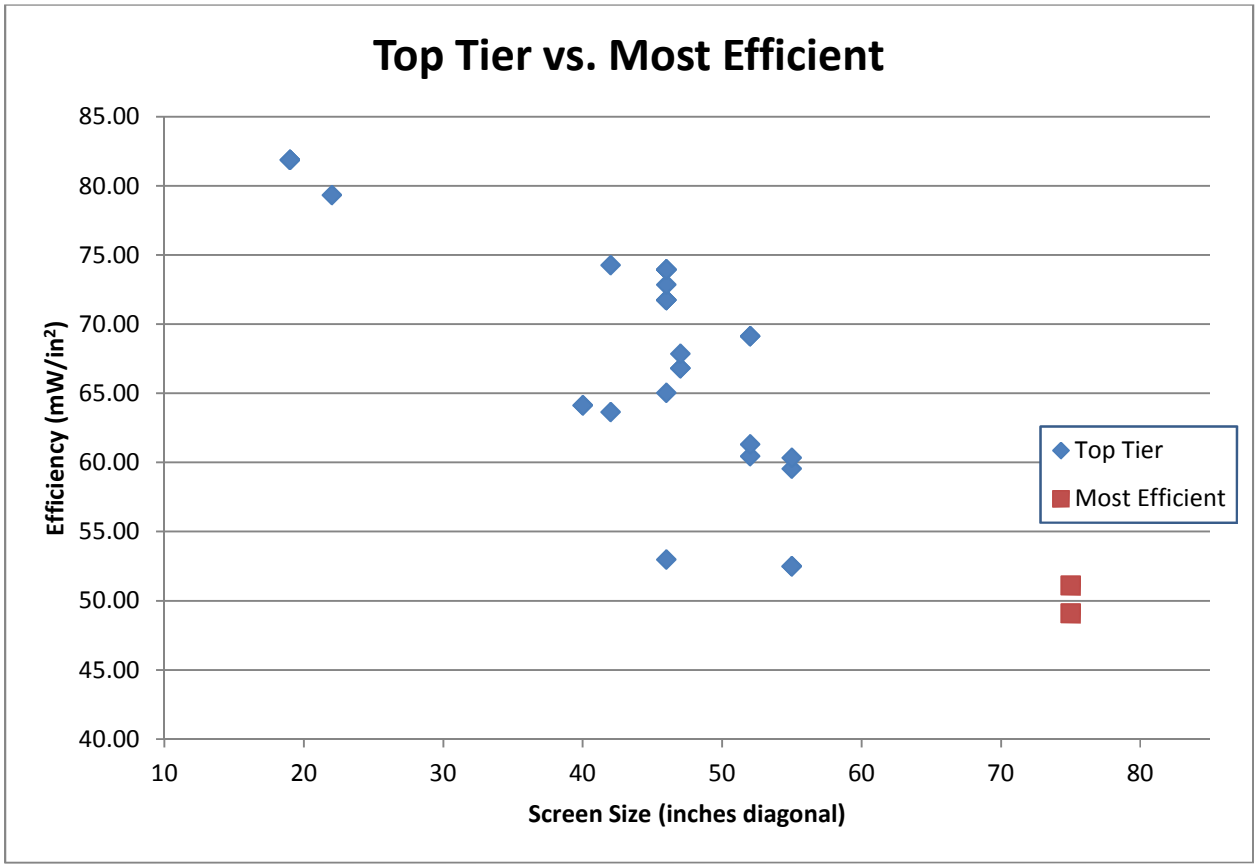

Figure 2 - Top Tier-qualifying Devices and the two Most Efficient Devices

* * *

ENERGY STAR should not create a "Top Tier" program which excludes the most efficient devices. The Top Tier program recognition criteria for televisions should be modified as follows:

$$P_{MAX} = (0.0073 \times A) + 2.0$$
$$P_{MAX} = maximum\ allowable\ On\ Mode\ power\ consumption$$
$$A = viewable\ screen\ area\ of\ the\ product$$

Please feel free to contact me if there are any questions.

Sincerely,

Frank DeMartin
Vice President, Marketing
Mitsubishi Digital Eelctronics America.